

What is claimed is:

1. A method of treating a subject having a condition associated with expression or overexpression of an oncogene, comprising administering a composition
5 comprising a pharmaceutically acceptable excipient and a transcription-inhibiting amount of at least one polyamide, said polyamide comprising
at least four complementary pairs of aromatic carboxamide residues, the complementary pairs of aromatic carboxamide residues being selected to correspond to the nucleotide sequence of a dsDNA target,
10 at least two aliphatic amino acid residues chosen from the group consisting of glycine, β -alanine, γ -aminobutyric acid and 5-aminovaleric acid, and
at least one terminal alkylamino residue.
2. The method of claim 1 wherein said subject is a human patient.
- 15 3. The method of claim 1 wherein said oncogene is a cellular or endogenous oncogene.
4. The method of claim 1 wherein said inhibition of transcription of said
20 oncogene is by modulating the binding to dsDNA of a protein factor selected from the group consisting of ESX, ETS and TBP.
5. The method of claim 1 wherein said condition is breast cancer.
- 25 6. The method of claim 1 wherein said polyamide has a binding affinity at the target dsDNA sequence of at least 10^9 M^{-1} and a selectivity of at least about two.
7. The method of claim 1 wherein the complementary pairs of aromatic carboxamide residues are selected to correspond to the nucleotide sequence of the
30 dsDNA target are chosen from the group consisting of
Im/Py to correspond to the nucleotide pair G/C,

Py/Im to correspond to the nucleotide pair C/G,
Py/Py to correspond to the nucleotide pair A/T,
Py/Py to correspond to the nucleotide pair T/A,
Hp/Py to correspond to the nucleotide pair T/A, and
5 Py/Hp to correspond to the nucleotide pair A/T,

where Im is N-methyl imidazole, Py is N-methyl pyrrole and Hp is 3-hydroxy
N-methyl pyrrole.

- 10 8. The method of claim 1 wherein at least one aliphatic amino acid residue is β -alanine.
9. The method of claim 1 wherein said polyamide comprises two β -alanine residues which form a complementary pair of residues corresponding to the nucleotide pair A/T or T/A.
- 15 10. The method of claim 1 wherein said terminal alkylamino residue is a N,N-dimethylaminopropyl residue.
11. The method of claim 1 wherein at least one Py of a carboxamide pair is
20 replaced by a β -alanine.
12. The method of claim 1 wherein said polyamide is selected from the group consisting of polyamides Her2-1, 70, and RPR70.